



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
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BOSTON, MASSACHUSETTS 02114-2023

December 28, 2000

Lonnie Monaco (monacolj@exchange.efdnorth.northdiv.navy.mil)
Northern Division, Naval Facilities Engineering Command
Code 1821/LM
10 Industrial Highway, Mailstop 82
Lester, PA 19113-2090

**Re: *Monitoring Event 17 (September 2000) Report for Sites 1, 3, and Eastern Plume
Summary of the September 2000 Aqueous Diffusion Pilot Study, Eastern Plume
Monitoring Event 17 (September 2000) Report for Site 9
Monitoring Event 2 (September 2000) Report for Site 2
Naval Air Station Brunswick, Maine***

Dear Mr. Monaco:

Thank you for the opportunity to review the above reports, which were prepared for the Navy by EA Engineering, Science and Technology and dated in November 2000. Upon our review, the EPA has several comments and observations that are attached.

Since these reports are released as a final document, we hope our comments may provide opportunity to discuss and possibly resolve some issues prior to drafting the annual reports. Some of our comments, especially regarding display of the plume in specific areas, are long standing but may not be resolved until after future work discussed at the technical meeting on December 13-14 is complete. For any questions, please contact me at 617.918.1344 or barry.michael@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "M S Barry", is written over the typed name.

Michael S. Barry
Remedial Project Manager
Federal Facilities Superfund Section

Attachment

Enclosures

cc. Al Easterday/EA (aeasterd@eaest.com)
Carolyn LePage/LePage Environmental (clepagegeo@aol.com)
Alastair Lough/Gannet-Fleming (jlough@gfnet.com)
Pete Nimmer/EA Environmental (pln@eaest.com)
Claudia Sait/ME DEP (claudia.b.sait@state.me.us)
Tony Williams/NASB (WilliamsA@nasb.navy.mil)

To aid in response comments are coded:

(RR) Response requested.

(MTG) Resolve at meeting/conference call?

(OBS) Observation, no specific response required.

(N/D) Note comment and defer to TEG after annual report or later when more information is available.

(NR) No specific response requested by EPA, response at Navy's option.

Monitoring Event 17 (September 2000) Report for Sites 1, 3, and the Eastern Plume

1. (RR/MTG) EPA concurred that MW-217B would be the only well in landfill well to sampled for VOCs when the LTMP was revised because we concurred that this single point was sufficient to monitoring overall VOC levels within the landfill. We note that it was dry and thus not sampled for event 17. In future we prefer that if this situation (or a similar one) is encountered again that an alternate well be proposed and sampled in order to monitor overall VOCs in the landfill. The existing well network is dense enough that one of the gauged wells could be substituted, events occur over enough days for coordination and the LTMP is flexible enough to allow a one event revision.
2. (OBS) We aren't clear why the diffusion pilot wells weren't sampled for water quality parameters? Is it because low flow sampling in effect would have been thus performed after the samplers were removed? Though water quality parameters aren't required by the LTMP they will be needed to accurately predict natural attenuation rates by dechlorination (but not needed for diffusion). Perhaps the Navy/EA may propose a more cost effective way to gather this data if needed?
3. (N/D) Figure 5 and 6. EPA is general supports DEP comments regarding the groundwater flow contours. Regarding the deep contours, the points currently used may indicate northward flow south of Mere Brook, but it's EPA's view that other points (either that were used on RI or new ones) should be included to obtain the most accurate flow. In any case the discrepancy with the RI should be resolved (this area is beyond the influence of EW-1). This issue may not be resolved until after the TEG studies and makes recommendations based on the future work to verify the southern plume boundary/adjust the LTM network.
4. Figure 10. EPA has several issues with the depiction of the plume and in general supports MEDEP comments. Some are best noted and deferred for now, however several which involve interpretation may be able to be resolved with a meeting/conference call.
 - a. (RR/MTG) The north and south "lobes" above the MCL were combined to one plume in the event 15 report, then separated again in event 16. Because of the VOC concentrations, hydrogeology and close proximity we think one plume is the best depiction, yet this issue does not warrant a new well to close the 400-500 foot MW-331 to EW-4 "gap".
 - b. (N/D) EPA doesn't think the groundwater flow or geologic structure supports the abrupt end of the plume between the 200 feet from MW-205 (503 ppb) to MW-105A (1 ppb).

Another explanation could be that MW-105A is screened a critical 10 feet or so shallower of MW-205. This could be even more important in light of EA's findings that the deep sand layer may be much narrower and deeper than the RI indicated. MW-205 is also in better southwest axis alignment between the RI VOC detection at CP-118 and the plume main axis.

- c. (RR/MTG) MW-230A has indicated marginal VOCs for several events, it should be discussed whether to revise it's designation to a perimeter well. In EPA's view, hydrogeologic structures indicate it unlikely that the plume goes very far beyond this well to the southeast.
 - d. (N/D) EPA's work this summer indicates that the edge of the plume to northeast may require revision, pending EPA's final report/future work results/research.
5. (RR/MTG) Landfill results. Recommend the comment about gas vents 12 & 13 not being complete be more fully explained in the annual report.

Summary of the September 2000 Aqueous Diffusion Pilot Study, Eastern Plume

- 1. (NR) EPA appreciates this report and looks forward to discussing the recommendations at a meeting or conference call.
- 2. (NR/MTG) EPA believes there is sufficient data to discuss using only one diffuser per well for the next event and for expanding the pilot study. How to statistically analyze and display the correlation to low flow sampling should be discussed. This will be needed to justify for the project record the basis of our decision to switch methods.
- 3. (NR/MTG) Regarding site 9, diffusers have great potential to yield added information, however a correlation for expected low concentrations should be prepared as discussed in 2 above. Because of the natural attenuation remedy, water quality parameters are required for site 9.
- 4. (NR/MTG) In the future, the diffuser pilots should be part of the event reports.
- 5. (NR) We concur the LTMP should be revised, if only to revise the program summary (table 2) for each event. EPA is working on an internal diffuser addendum draft LTMP revision to submit EPA QA for comment.

Monitoring Event 17 (September 2000) Report for Site 9

No comments to the monitoring event report, will look forward to the annual report.

Monitoring Event 2 (September 2000) Report for Site 2

No comments to the monitoring event report, will look forward to the annual report.